

***Quercus prinus* - *Quercus rubra* / *Rhododendron maximum* / *Galax urceolata* Forest**

COMMON NAME	Rock Chestnut Oak - Red Oak / Great Rhododendron / Galax Forest
SYNONYM	Chestnut Oak Forest (Mesic Slope Heath Type)
PHYSIOGNOMIC CLASS	Forest (I)
PHYSIOGNOMIC SUBCLASS	Deciduous forest (I.B)
PHYSIOGNOMIC GROUP	Cold-deciduous forest (I.B.2)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (I.B.2.N)
FORMATION	Lowland or submontane cold-deciduous forest (I.B.2.N.a)

ALLIANCE *Quercus prinus* - *Quercus rubra* Forest Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Upland

RANGE

Globally

This community occurs in the southern Blue Ridge of Georgia, North Carolina, South Carolina, and Tennessee and could range into Virginia.

Great Smoky Mountains National Park

This association is uncommon and was sampled at only a single location in the northern portion of the Mount Le Conte quadrangle, above Hill Creek. It was observed on the Cades Cove quadrangle in the vicinity of Bunting Branch. It is possible elsewhere in the Park.

ENVIRONMENTAL DESCRIPTION

Globally

This forest is found on moderate to very steep slopes with northerly exposures, typically at elevations greater than 2800 feet. Soils are deep and well-drained, although rock outcroppings may occur.

Great Smoky Mountains National Park

This association was sampled on a steep, north-facing slope at 1780 feet elevation. It should be sought on steep, upper, north-facing slopes at elevations up to 3500 feet.

MOST ABUNDANT SPECIES

Globally

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Quercus prinus</i> , <i>Quercus rubra</i>
Tall shrub	<i>Rhododendron maximum</i>

Great Smoky Mountains National Park

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Quercus prinus</i> , <i>Acer rubrum</i>
Tall shrub	<i>Rhododendron maximum</i>

CHARACTERISTIC SPECIES

Globally

Quercus prinus, *Quercus rubra*, *Rhododendron maximum*, *Galax urceolata*

Great Smoky Mountains National Park

See above

VEGETATION DESCRIPTION

Globally

This forest is dominated by *Quercus prinus*, usually with lesser amounts of *Quercus rubra* and *Acer rubrum*, occurring over a dense, very tall shrub stratum of *Rhododendron maximum* (2-6 meters). In some areas *Rhododendron minus* may dominate or *Tsuga canadensis* may have dense understory regeneration. Other common shrubs include *Gaylussacia ursina* and *Kalmia latifolia*. Herbs are sparse, but *Galax urceolata* is in most occurrences. Some examples may have sparse canopies and occur in association with rock outcroppings.

Great Smoky Mountains National Park

This forest is dominated by *Quercus prinus*, with lesser amounts of *Acer rubrum*, occurring over a dense, tall-shrub stratum of *Rhododendron maximum*. Groundcover is dominated by leaf litter, and herbs are scattered about. Typical herbs include *Chimaphila maculata*, *Galax urceolata*, *Goodyera pubescens*, and *Polystichum acrostichoides*.

OTHER NOTEWORTHY SPECIES

No information

CONSERVATION RANK G3G5

RANK JUSTIFICATION

DATABASE CODE C EGL006286

COMMENTS

Globally

Great Smoky Mountains National Park

This forest occurs downslope from (*Quercus prinus*, *Quercus coccinea*) / *Kalmia latifolia* / *Galax urceolata* Forest (CEGL006271) and can continue down slope into steep ravines. It is unlikely that the signature of this association can be distinguished from other *Quercus prinus*-dominated forests.

REFERENCES

Schafale and Weakley 1990, Simon pers. comm.